

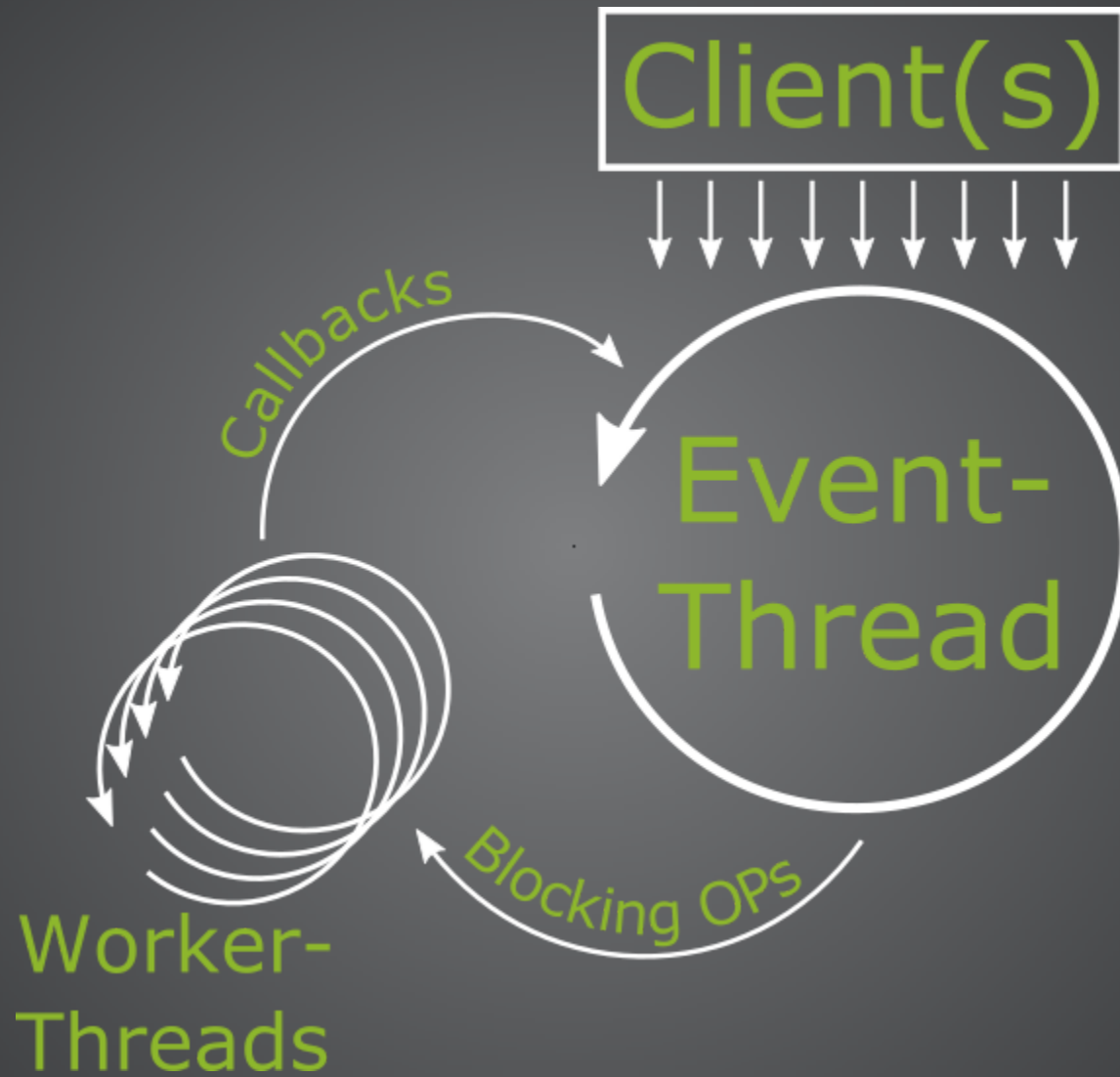
VERT.X

DAS BESSERE NODE.JS!

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NODE.JS



**ACHTUNG
BUZZWORD!**

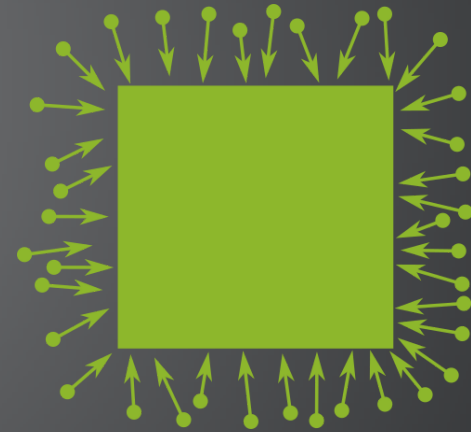
VORTEILE



spart



performt



skaliert

... ABER

Node.js



JavaScript!

NODE.JS SAMPLE

```
var http = require('http');
const PORT = 8080;

var server = http.createServer(function(request, response){
    response.end('Hello World @ ' + request.url);
});

server.listen(PORT, function(){
    console.log('Server started: http://localhost:'+PORT);
});
```

PROBLEME BEI JAVASCRIPT PROJEKTEN

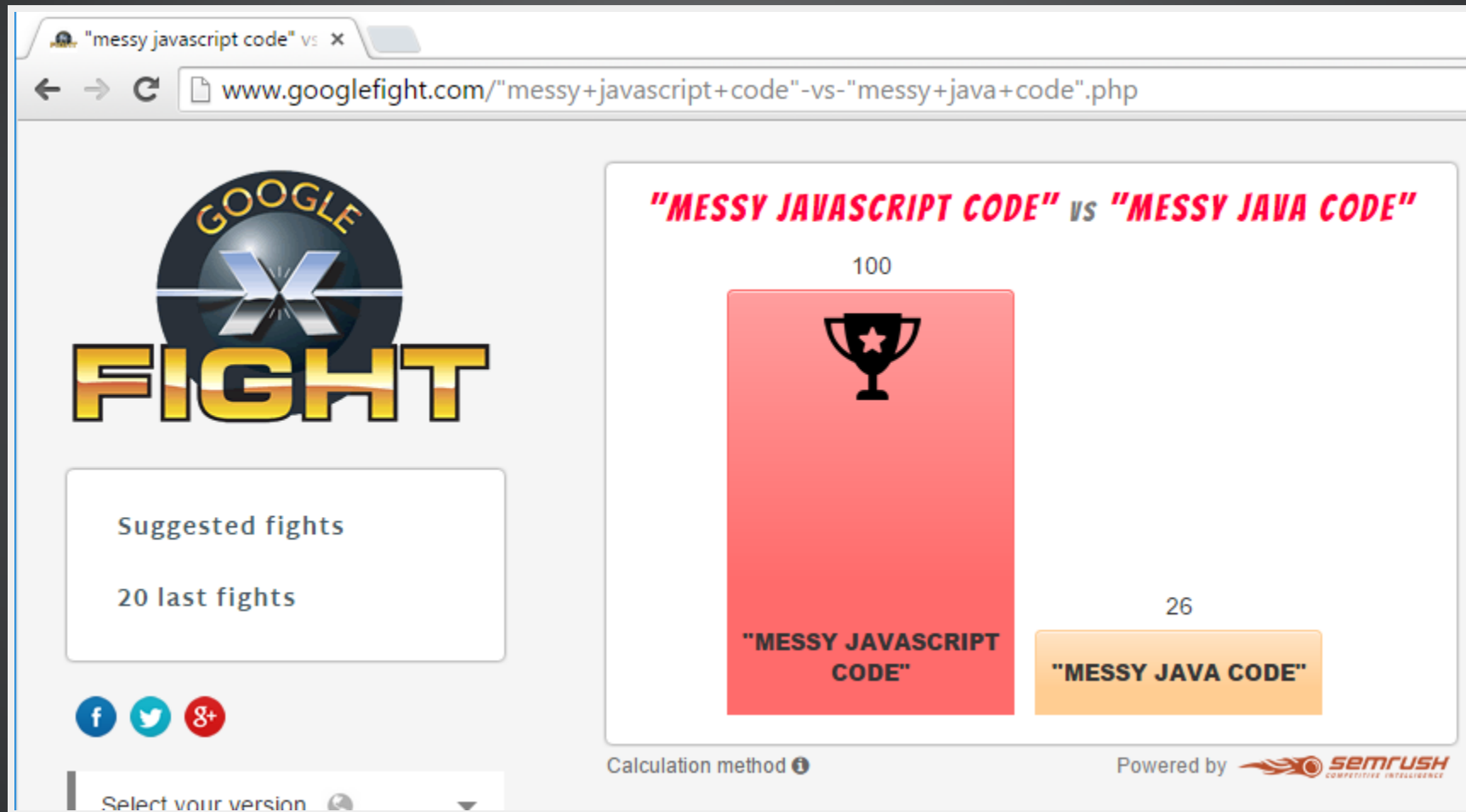
dynamische Typisierung
+ schlechte Dokumentation



PROBLEME BEI JAVASCRIPT PROJEKTEN

ONE DOES NOT SIMPLY REFACTOR JAVASCRIPT

PROBLEME BEI JAVASCRIPT PROJEKTEN



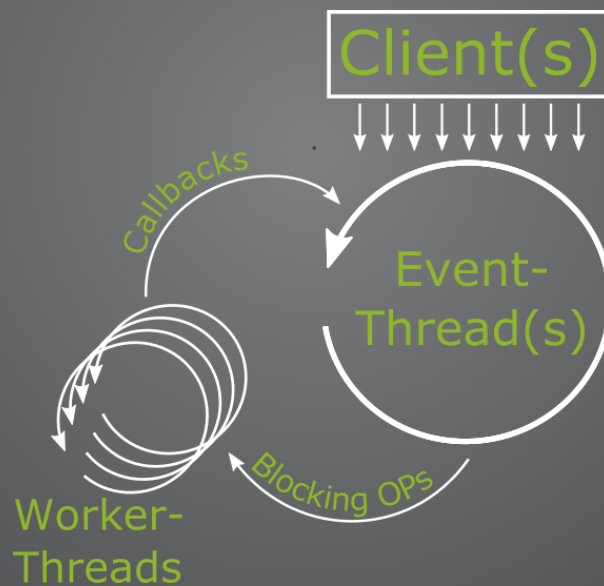
Quelle: <http://www.googlefight.com/%22messa+javascript+code%22-vs-%22messa+java+code%22.php>



* für Projekte die gewartet werden müssen

VERT.X

überträgt Node.js Konzept auf JVM



CALLBACKS MIT JAVA???

FACEPALM

VERT.X SAMPLE

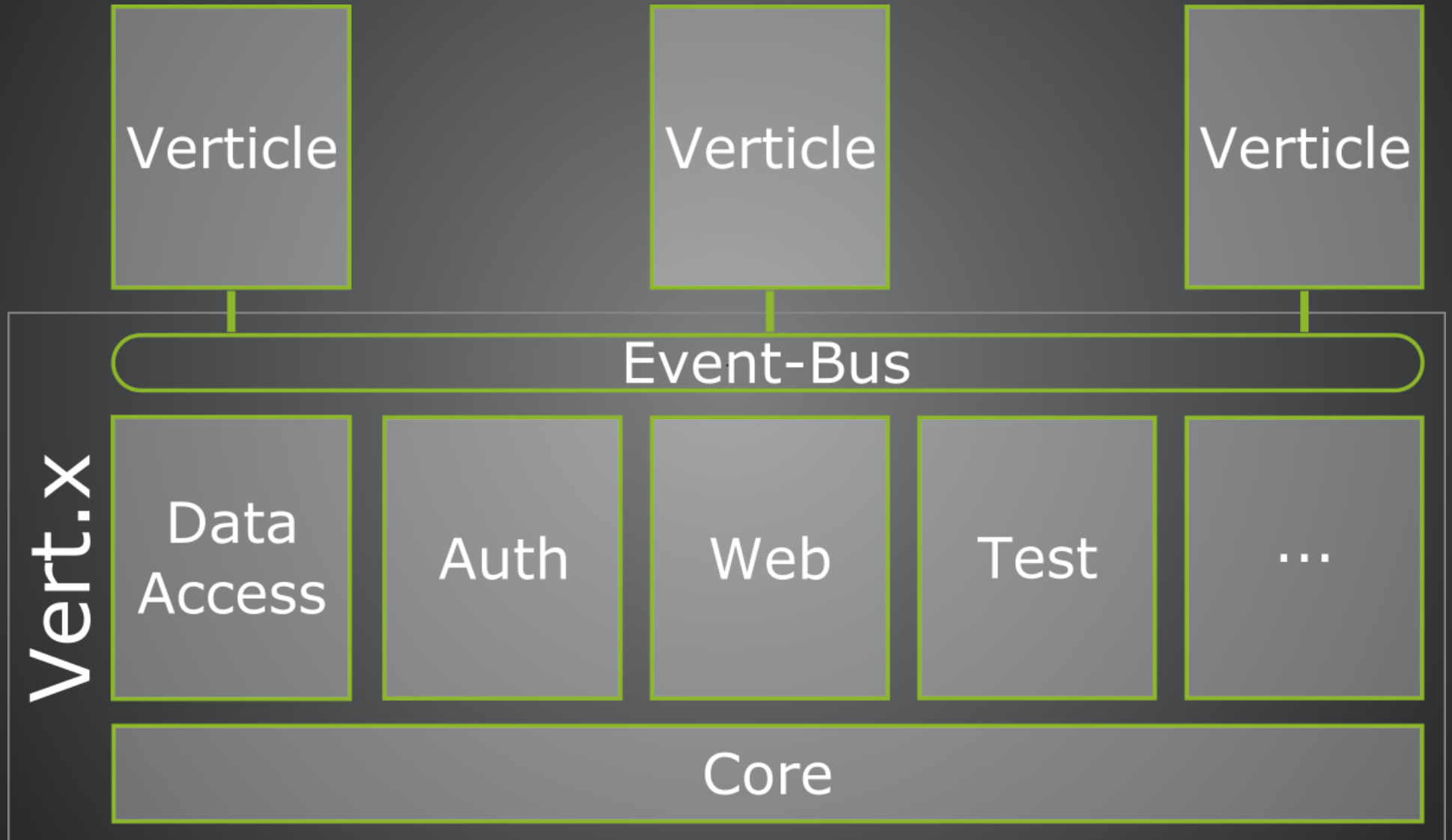
```
public class Server extends AbstractVerticle {
    public void start() {
        final int port = 8080;

        HttpServer server = vertx.createHttpServer().requestHandler(req -> {
            req.response().end("Hello World @ " + req.absoluteURI());
        });

        server.listen(port, result -> {
            System.out.println("Server started: http://localhost:"+port);
        });
    }
}
```

Node.js Sample

AUFBAU EINER VERT.X ANWENDUNG



ANWENDUNG STARTEN

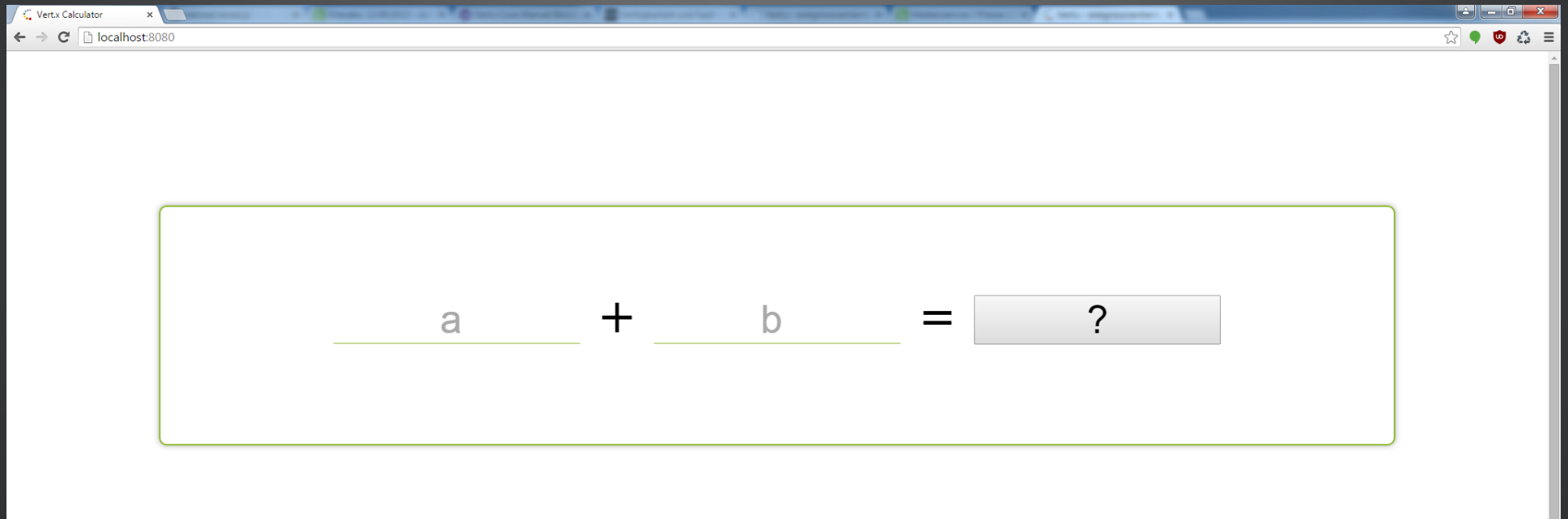
main-Methode

```
public static void main(String[] args) {  
    Vertx vertx = Vertx.vertx();  
    vertx.deployVerticle(new MyVerticle());  
}
```

Bash

```
$> vertx run com.buschmais.MyVerticle -cp myVerticle.jar
```

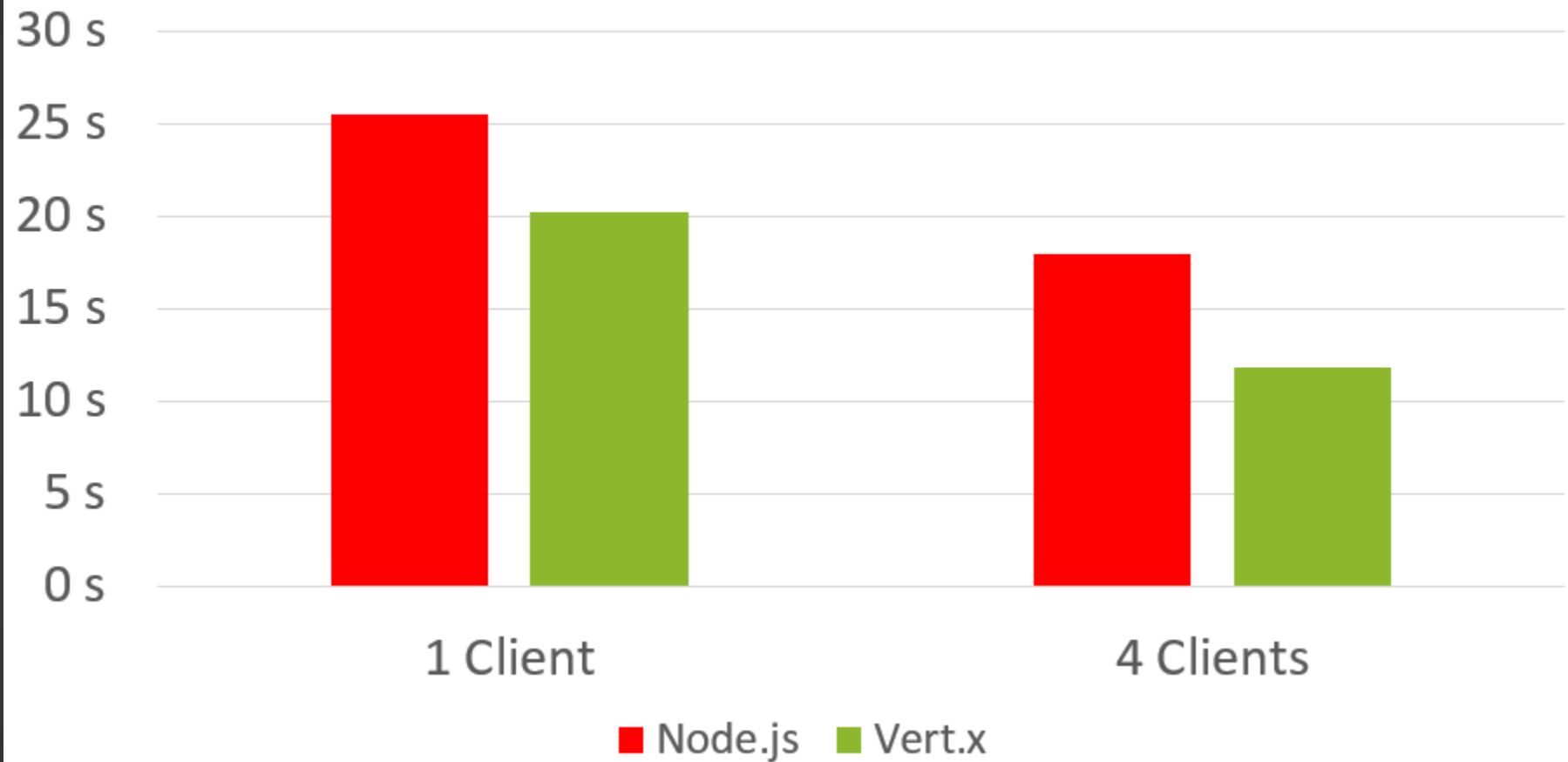
DEMO - "TASCHENRECHNER"



»Aber Java ist langsam!«

unbekannter C-Entwickler

Hello World Example, 100.000 Requests



Vert.x 2 Benchmarks auf www.techempower.com

! ACHTUNG !
- BUZZWORD -

WIE ÜBERZEUGE ICH DIE ENTSCHIEDER?

polyglot, reactive, scalable, NoSQL-DB-Support,
Docker-Images, Metrics, JCA-Adaptor, WebSocket-
Support, OSGi, Microservices

"Most Innovative Java Technology" - JAX Innovation
Awards 2014

VIEL SPASS BEIM AUSPROBIEREN

<http://vertx.io>

 buschmais.com

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Die buschmais
Technologiewerkstatt -
unsere neue
Workshopreihe

VERT.X REACTIVE SAMPLE

```
Router router = Router.router(vertx);
router.post().handler(BodyHandler.create());

ObservableHandler<RoutingContext> observable = RxHelper.observableHandler();
observable.subscribe(context -> {

    String aStr = context.request().getFormAttribute("a");
    String bStr = context.request().getFormAttribute("b");
    JsonObject msg = new JsonObject().put("a", aStr).put("b", bStr);
    context.put("a", aStr);
    context.put("b", bStr);

    vertx.eventBus().<Integer>sendObservable("calculator", msg).subscribe(
        callResult -> { context.put("result", callResult.body().next()); },
        t -> { context.response().end(t.getMessage()); });
});

router.post("/calc.hbs").handler(observable.toHandler());
router.route("/*").handler(getTemplateHandler());
router.route("/*").handler(StaticHandler.create("src/main/resources/static"));

final int port = 8080;
vertx.createHttpServer().requestHandler(router::accept)
    .listen(port, result -> {
        System.out.println("Reactive Server ready. Port: "+port);
    });
```